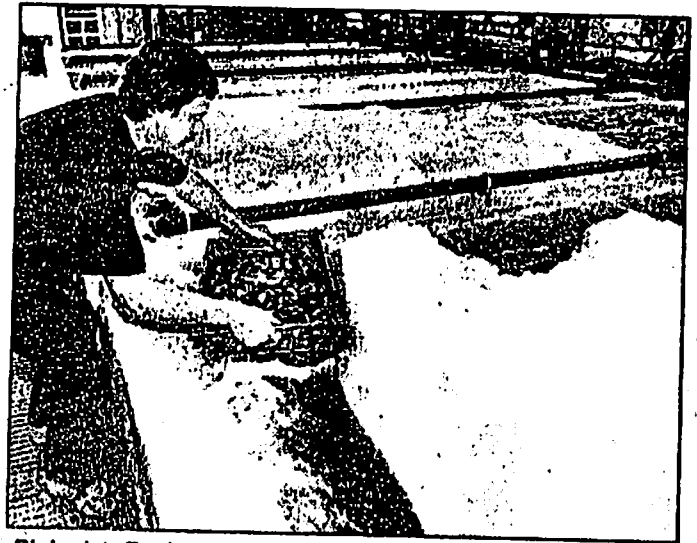


DUXBURY HISTORY FILE  
REFERENCE

# CLEANING THE catch



Biologist David Roach of the state Division of Marine Fisheries places a crate of clams into a washing tank.

## N. Shore plant keeps S. Shore clamming viable

By MIA TAYLOR  
The Patriot Ledger

**F**rom the outside, it looks almost like a summer home, a two-story, sun-bleached clapboard building perched on the edge of the beach on Plum Island in Newburyport.

Inside, the pungent smell of clams and the spray from their cleaning tanks washes over you.

All the clams plucked from restricted beaches around Boston Harbor by

licensed commercial clammers must pass through the state shellfish purification plant in Newburyport for 48 hours of cleaning before they can be sold and safely turned into clamcakes, clam chowder, clam strips and fried clams for the legions of clam lovers in New England and beyond.

The plant operates 24 hours a day these days, processing clams that may be contaminated by bacteria. Earlier this month, the reopening of clam flats at Wollaston Beach in Quincy overwhelmed the plant with a 10,450-pound shipment of clams.

On average, 40,000 to 50,000 bushels, or 2 to 3 million pounds of clams, from restricted beaches around Boston Harbor — which includes beaches in Quincy, Hull, Hingham and Weymouth

— pass through the plant each year for cleaning. Restricted beaches can be clammed only under certain weather and water conditions.

More than a decade ago, water pollution forced the closure of clam flats all along the coast and left Massachusetts' multimillion-dollar clam industry fighting to survive.

Today, the ongoing effort to document and classify the conditions along the state's shoreline and the cleaning process at Plum Island are helping the industry hold its ground.

The plant was built by the town of Newburyport in 1928 in response to pollution in the nearby Merrimack River. Today, it is a key part of helping

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GREG DERR photos/The Patriot Ledger  
**Shawn Morrow of the state Division of Marine Fisheries washes down crates of clams that have been cleaned at the state's shellfish purification plant in Newburyport.**



A clammer rakes the mud flats at Duxbury Beach.

GREG DERR photos/The Patriot Ledger

Bacteriologist Diane Regan of the state Division of Marine Fisheries opens clams for testing after they have gone through 48 hours of cleaning.

# North Shore plant key for clammers

## CLAMS

Continued from Page 1

clams culled from all around Boston Harbor make it to market.

"This plant is a last-ditch attempt to maintain a fishery," says Dave Roach, a marine biologist for the state Division of Marine Fisheries and Wildlife, which operates the plant.

The cleaning process at Plum Island is almost like sending the clams to a spa. Clammers pay \$3 a basket — about 50 pounds — to have the clams cleaned.

For 48 hours, clams are rinsed in tubs of purifying salt water purging them of fecal coliform bacteria, which is present in human and animal waste and may indicate contamination from sewage or storm runoff.

On the first floor of the treatment plant is a row of nine nearly 8-foot-deep tubs. Clams are transferred directly from the trucks they arrive in to the tubs. The water flows from wells dug deep in nearby dunes.

Coiled along the wall are silver tubes carrying the salt water in and out of the clam tanks and past a series of ultraviolet lights that kill bacteria.

To test whether the process is working, lab technicians make a "clam frappe."

While the clams are being rinsed, technicians toss some of the clam meat into an industrial blender. The liquefied clam meat is transferred into petri dishes and incubated 24 hours.

If the frappe tests clean, the clams are free to go to market. Those that don't are held an additional day. Clams still not testing clean after three days are discarded. Roach can recall only one time in 1998 when the clams had to be thrown out.

The Plum Island plant is the final step in an effort to maintain the shellfish industry, which has had bleaker days.

By 1986, pollution had forced the closing or restriction of shellfish harvesting in all of Boston Harbor, 60 percent of the North Shore and more than 26,000 acres of coastal flats in Hull.

"The Food and Drug Administration was going to embargo interstate shipments of Massachusetts shellfish," Roach said.

The federal government issued an ultimatum: the state would have to properly measure bacteria levels of clam flats or close them.

At that time, there were 230 diggers in Quincy and Weymouth and 100 in Hingham and Hull, said Andy Ayer, Quincy's clam warden.

In 1985, the cleanup of the Boston Harbor began, which helped Marine Fisheries and Wildlife maintain shellfishing on beaches around the harbor.

And beginning in 1988, Roach and others made it a priority to document the conditions of formerly unclassified clamming flats along the state's coast, making it clear which ones were clean enough to be opened for harvesting.

Around the same time, communities throughout the South Shore began serious local cleanup efforts, which in most cases involved repairing failing septic systems, said Jim Fair, assistant director of Marine Fisheries and Wildlife.

Cohasset Harbor and Duxbury Bay have reopened during the past decade thanks to such joint state and local cleanup, Fair said.

Sewage leaks were a large part of the reason Wollaston was closed to clammers for the past decade. Quincy spent years repairing sewer lines in the Wollaston area and just this month clammers were able to dig there once again.

But only commercial clammers have been allowed to return to Wollaston and Quincy's other clam flats. There is still nowhere in the Boston Harbor area where a family can dig clams to safely cook for dinner.

Roach said that would be like playing Russian roulette. Recreational permits for clamming are only issued in towns south of the harbor.

The next step toward cleaner shores and cleaner clam harvests along the South Shore will be the activation of a new outfall pipe from the Deer Island sewage treatment plant, Roach said.

"That should help improve water quality because treated sewage will no longer be dumped in Boston Harbor," Roach said.

Once the Deer Island line is complete, Peddock's Island and Nantasket might be reopened to clammers, Roach said.

But will the beaches ever be clean enough to eat the clams untreated?

"It's hard to say," Roach said. "You're dealing with an urban estuary. I think we've been able to secure a place for clamming in the future. And as time goes by, things are only going to get better."